

Explanatory Statement

Civil Aviation Safety Regulations 1998

Part 139 Manual of Standards (Global Reporting Format and Miscellaneous Amendments) Instrument (No. 1) 2024

Part 91 Manual of Standards (Global Reporting Format) Amendment Instrument 2024 (No. 1)

Purpose

Under subsection 15J (4) of the *Legislation Act 2003* (the *LA*), this Explanatory Statement deals with both of the above Manuals of Standards amendment instruments because they are interrelated, the Part 91 Manual of Standards amendment being essentially consequential on the Part 139 Manual of Standards amendment.

Since 2019, the *Part 139 (Aerodromes) Manual of Standards 2019* (the **Part 139 MOS**) has set out the revised and consolidated standards for the construction, maintenance and operation of certified aerodromes, and for the radiocommunications facilities required at aerodromes.

The *Part 139 Manual of Standards (Global Reporting Format and Miscellaneous Amendments) Instrument (No. 1) 2024* (the **Part 139 MOS amendment**) amends the Part 139 MOS essentially to establish the new global reporting system for assessing and reporting runway surface conditions, known as the Global Reporting Format (**GRF**), mandated by the International Civil Aviation Organization (**ICAO**), and designed to enable the harmonised assessment and reporting of runway surface conditions in the interests of aviation safety.

The GRF provides uniformity and consistency in the assessment and reporting of runway surface conditions. Assessing and reporting the condition of the movement area and, in particular, the runway is necessary to provide the flight crew with the information needed for safe operation of the aeroplane. A runway condition report (**RCR**) is used for reporting assessed information.

The *Part 91 (General Operating and Flight Rules) Manual of Standards 2020* (the **Part 91 MOS**) sets out the standards for “the rules of the air” for all pilots, and the general operating rules for pilots who are not operating under an Air Operator’s Certificate or other certificate. The Part 91 MOS is a foundational ruleset for the safety of all aviation operations. It consolidates the existing rules of the air, contains some new rules to enhance operational flexibility and improve aviation safety, and it brings Australian requirements more in line with the Standards and Recommended Practices of ICAO.

The *Part 91 Manual of Standards (Global Reporting Format) Amendment Instrument 2024 (No. 1)* (the **Part 91 MOS amendment**) makes 3 amendments to the Part 91 MOS to incorporate implications of the GRF into 3 sections of the Part 91 MOS.

Background — Part 139 MOS

According to the International Civil Aviation Organization (**ICAO**) Annex 14, Volume I:

“[M]ovement areas are exposed to a multitude of climatic conditions and consequently a significant difference in the condition to be reported. The runway

condition report (RCR) describes a basic methodology applicable for all these climatic variations and is structured in such a way that States can adjust them to the climatic conditions applicable for that State or region.”

These internationally harmonised procedures are reflected in the assignment of a runway condition code (*RWYCC*), based on a runway surface condition and the consequential aircraft braking action which the flight crew should expect for each value of the RWYCC. Thus, for example (from the Part 139 MOS amendment):

Using a runway surface description to assign a RWYCC	
For a runway surface description of: Column 1	the applicable RWYCC is: Column 2
DRY	6
WET (The runway surface is covered by any visible dampness or water up to and including 3 mm depth)	5
WET (“slippery wet” runway)	3
STANDING WATER	2

The introduction of the RCR based on the runway surface condition and RWYCC, in conjunction with new or existing aeroplane performance data, establishes a clear link between the observation, reporting and accounting of runway surface conditions in aeroplane performance.

Thus, the intent of the RCR is to put into place a common language between all runway safety participants based on the impact of runway surface conditions on aeroplane performance. It is necessary, therefore, that all participants, from aerodrome operators to pilots and aeroplane operators, are familiar with the new GRF and its associated RCR.

Australia has relatively benign weather conditions but does experience wet seasons, tropical storms, thunderstorms and extensive periods of rain. However, there are a relatively small number of certified aerodromes which may experience frost or snow conditions. Therefore, the majority of runway, or contaminated runway reporting, will be in relation to “wet” or “standing water”.

There is also another category of runway surface friction reporting which is “slippery wet” runways. These are not defined as contaminated but have runway surface friction impacted through a combination of deposits (for example, rubber) on the runway and water, usually rain).

In implementing the ICAO runway surface conditions associated with the GRF, the Part 139 MOS amendment separates them into: “dry” and “wet” surface conditions; “slippery wet” surface conditions; and “snow” and “ice” surface conditions. This allows an aerodrome operator, or pilots and aircraft operators, to quickly be able to locate the regulatory requirements for reporting the relevant runway surface conditions applicable.

Background — minor or miscellaneous amendments

The opportunity has also been taken in the Part 139 MOS amendment to make a number of minor or miscellaneous amendments to insert new definitions, correct typographical errors, modify flight check rules for VASIS lighting systems, require additional aerodrome manual procedures for use of surface vehicles in aerodrome works, and revise the communication equipment requirements for airside vehicles.

The miscellaneous and minor amendments are contained in Schedule 1 in the Part 139 MOS amendment (these include some definitions for the GRF). The GRF amendments are contained in Schedule 2.

Background — Part 91 MOS

The Part 91 MOS amendment is consequential on the Part 139 MOS amendment. It is designed to capture the implications of the GRF for pilots in command of aeroplanes operating under the Part 91 MOS. It adds GRF references to 3 provisions in the Part 91 MOS.

Existing Table 21.05 (1) lists the prescribed reports that the pilot in command of an aircraft must make to the ATC service, on landing when on the ground at a controlled aerodrome, or in Class A, B, C or D airspace, or in an IFR aircraft in Class E airspace.

The first Part 91 MOS amendment prescribes a new report: if the pilot in command finds that the runway braking action encountered is not as good as reported, they must report that runway braking action to ATC via a report known as an AIREP SPECIAL.

Under subsections 24.02 (3) and 25.02 (3), to ensure that an aeroplane has the performance capability to safely clear all obstacles during take-off or landing, the pilot in command must determine the aeroplane's take-off performance and landing performance, as the case may be, from certain information, including the AFM, the manufacturer's data manual and other appropriate data.

The second and third amendments add to the list of relevant data sources for this purpose mention of the type of runway surface, and the runway surface condition encountered, where this data is available.

Background — commencement

The Part 139 MOS amendment commences on the day after it is registered, and the minor or miscellaneous amendments in Schedule 1 take effect on that commencement.

However, to facilitate implementation, operators of controlled aerodromes, or of any certified aerodromes where scheduled Part 121 air transport operations are conducted, will have until not later than 1 August 2024 to comply with the GRF requirements under Schedule 2. Other certified aerodrome operators will have until not later than 1 February 2025 to comply with those requirements.

The Part 91 MOS amendment commences on the day after it is registered. As the Part 139 MOS amendments are progressively implemented by aerodrome operators, GRF information will become available to pilots in command. Pilots will be required to taken into account the prescribed types of runway surface, and the prescribed runway surface conditions, as they become available.

Legislation

Under section 3A of the *Civil Aviation Act 1988* (the *Act*), the main object of that Act is to establish the regulatory framework for maintaining, enhancing and promoting the safety of civil aviation, with particular emphasis on preventing aviation accidents and incidents.

Subsection 98 (1) of the Act provides, in part, that the Governor-General may make regulations, not inconsistent with the Act, prescribing matters required or permitted by the Act to be prescribed, or necessary or convenient to be prescribed, for carrying out or giving effect to the Act. The *Civil Aviation Regulations 1988* (*CAR*) and the *Civil Aviation Safety Regulations 1998* (*CASR*) are made under the Act.

Under regulation 139.005 of CASR (originally contained in the *Civil Aviation Safety Amendment (Part 139) Regulations 2019*), the Civil Aviation Safety Authority (*CASA*) may issue a Manual of Standards (a *MOS*) for Part 139 of CASR that prescribes matters required or permitted by that Part to be prescribed, or necessary or convenient for carrying out or giving effect to new Part 139 regulations. This power is complemented by other provisions throughout Part 139 which empower CASA to prescribe specific matters in the Part 139 MOS.

Exactly the same approach applies to the Part 91 MOS amendment, the MOS-making head of power being under regulation 91.040 of CASR.

Legislation — *Acts Interpretation Act 1901*

Under subsection 33 (3) of the *Acts Interpretation Act 1901*, where an Act confers a power to make, grant or issue any instrument of a legislative or administrative character (including rules, regulations or by-laws), the power shall be construed as including a power exercisable in the like manner and subject to the like conditions (if any) to repeal, rescind, revoke, amend, or vary any such instrument.

Details of the Part 139 and Part 91 MOS amendments

Of their nature, all of the Part 139 MOS amendments are technical and forensic adjustments to the MOS. Explanations for each of the individual amendments in the Part 139 MOS amendment are set out in Appendix 1.

The much shorter set of Part 91 MOS amendments has already been described above under Background — Part 91 MOS.

Legislation Act 2003

Under subsection 8 (4) of the LA, an instrument is a legislative instrument if it is made under a power that is delegated by the Parliament, and any provision of the instrument determines the law or alters the content of the law, and it has the direct or indirect effect of affecting a privilege or interest, imposing an obligation, creating a right, or varying or removing an obligation or right. The Part 139 MOS satisfied these requirements and, consequentially, the Part 139 MOS amendment does so also.

In addition, under paragraph 10 (1) (d) of the LA, an instrument that amends a legislative instrument is itself a legislative instrument.

Under paragraph 98 (5A) (a) of the Act, regulations may empower CASA to issue instruments in relation to matters affecting the safe navigation and operation of aircraft.

Under subsection 98 (5AA) of the Act, an instrument (like the Part 139 MOS) issued under paragraph 98 (5A) (a) is taken to be a legislative instrument if it is expressed to apply in relation to a class of persons or aircraft or aeronautical products.

The Part 139 MOS is an instrument empowered by regulation 139.005 “For subsection 98 (5A) of the Act”.

The standards set by the Part 139 MOS apply not to a particular person or persons but to the class of aerodrome operators. The Part 139 MOS was, therefore, by virtue of subsection 98 (5AA), a legislative instrument and subject to registration, and tabling and disallowance in the Parliament, under sections 15G, and 38 and 42, of the LA.

Consequentially, the same provisions and conclusions apply to the Part 139 MOS amendment.

Exactly the same approach applies to the Part 91 MOS amendment, the MOS-making head of power being under regulation 91.040 of CASR.

Sunsetting

The Part 139 MOS amendment relates to aviation safety and is made under CASR. Consequently, Part 4 of Chapter 3 of the LA (the sunseting provisions) does not apply to the instrument (as per item 15 of the table in section 12 of the *Legislation (Exemptions and Other Matters) Regulation 2015*: “An instrument relating to aviation safety made under the *Civil Aviation Act 1988*, the *Civil Aviation Regulations 1988* or the *Civil Aviation Safety Regulations 1998*”).

The instrument deals with aviation safety matters that, once identified, require a risk response or treatment plan. As such, the instrument is intended to have enduring operation and it would not be appropriate for it to be subject to sunseting.

The exemption from the sunseting provisions affects parliamentary oversight by not requiring the instrument to be remade at the end of the sunseting period (remaking would have the effect that the whole instrument must be retabled and would become subject to disallowance in the Parliament under sections 38 and 42 of the LA).

However, it is likely that further Part 139 MOS amendments will be made in the foreseeable future and these, while not subject to sunseting, will be subject to tabling and disallowance in the Parliament in the normal way. CASA would also be responsive to any major concerns expressed by the Parliament about the propriety of the Part 139 MOS. Hence, the scope for ongoing parliamentary scrutiny of the Part 139 MOS is not materially reduced.

Exactly the same approach applies to the Part 91 MOS amendment, the MOS-making head of power being under regulation 91.040 of CASR.

Incorporation by reference

Under subsection 98 (5D) of the Act, a MOS may apply, adopt or incorporate any matter contained in any instrument or other writing. A non-legislative instrument may be incorporated into a legislative instrument made under the Act, in the terms as that non-legislative instrument exists or as it is in force at a particular time or from time to time (including a non-legislative instrument that does not exist when the legislative instrument is made).

References to provisions of legislation or other legislative instruments are taken to be as they are in force from time to time by virtue of paragraph 13 (1) (c) of the LA. CASR and MOSs are freely available online on the Federal Register of Legislation.

Under subsection 14 (1) of the LA, a legislative instrument may incorporate provisions from another legislative instrument as in force at a particular time, or as in force from time to time.

Under paragraph 15J (2) (c) of the LA, the Explanatory Statement must contain a description of the incorporated documents and indicate how they may be obtained.

The Part 139 MOS amendment (amendment [8]) has the effect of incorporating aerodrome manuals of relevant aerodrome operators. These describe how an aerodrome operator will comply with all applicable legislative requirements, and how they will manage the safety of aerodrome operations. They are incorporated as they exist from time to time. Aerodrome manuals are the commercial proprietary intellectual property of aerodrome operators, and are not generally publicly available.

A number of other documents are referred to in Notes in the Part 139 MOS amendment as guidance materials. Although referenced as they exist from time to time, they are not incorporated into the Part 139 MOS. They include:

- Multi-Part Advisory Circular AC 91-32 and AC 139-22 v1.0, Global reporting format – Runway surface condition
- Procedures for Air Navigation Services — Aircraft Operations (PANS-Aerodromes)
- Assessment, Measurement and Reporting of Runway Surface Conditions (ICAO Document, Cir 355).

The Advisory Circular is freely available on the CASA website, and the ICAO documents are available for purchase from the ICAO online store.

There are no incorporations under the Part 91 MOS amendment.

Consultation

Under section 16 of the Act, in performing its functions and exercising its powers, CASA must consult government, industrial, commercial consumer and other relevant bodies and organisations insofar as CASA considers such consultation to be appropriate.

Under section 17 of the LA, before a legislative instrument is made, CASA must be satisfied that it has undertaken any consultation it considers appropriate and practicable in order to draw on relevant expertise and involve persons likely to be affected by the proposals.

The 2 MOS amendment documents were the subject of consultation as follows.

Water-affected runways are a hazard that can cause reduced surface friction for aeroplanes landing or taking off. The GRF can be an effective mitigator of these hazards. Therefore, the GRF policy proposals were initially consulted during October-November 2022 via the Proposed Policy for Implementation of ICAO's Global Reporting Format (CASA Policy Proposal PP 2211AS).

This was a preliminary policy proposal document which considered a limited applicability of the GRF to all controlled aerodromes with air transport operations, but only as a voluntary option for the remaining certified aerodromes with regular air transport operations.

Optional or voluntary implementation would require stakeholder consultation and mandatory provision of UNICOM services. On further examination, it was noted that, apart from the 23 Australian controlled aerodromes, this approach would have resulted in very few of the approximately 330 certified aerodromes establishing the GRF and providing the associated safety benefits.

Draft MOS amendment instruments were prepared detailing GRF Part 139 and Part 91 regulatory amendments. These were consulted during October-November 2023 via CASA document CD 2313AS and proposed a broader applicability of the scheme to all certified aerodromes.

This proposed adjustment was a result of a safety decision to extend reporting of runway surface conditions to non-controlled certified aerodromes.

Water-affected runways require greater landing and take-off distances and, in the worst-case scenario, can lead to runway excursions at non-controlled certified aerodromes, as was highlighted by the Australian Transport Safety Bureau (ATSB) in September 2021 (*Runway overrun involving Fokker F100, VH-NHY Newman Airport, Western Australia, on 9 January 2020, AO-2020-002*). In light of this, CASA considered it appropriate to enable GRF reporting at all certified aerodromes.

Prior to the above public consultation, the GRF policy and the MOS amendment proposals were reviewed, and supported for consultation, by the National Runway Safety Group (NRSRG) GRF Implementation Working Group. This is a joint CASA/industry consultation forum comprising representative of airlines, pilots and aerodromes.

The miscellaneous amendments included in the Part 139 MOS were also consulted at the same time in CD 2313AS.

There was wide industry recognition that the proposals for runway surface condition reporting would be a significant safety enhancement.

Some feedback noted impacts on regional and remote aerodromes and this was taken into consideration by CASA in two ways. Amendments to the Part 139 MOS required aerodrome operators to inspect and report runway conditions only when aeroplane operations are scheduled or notified in advance to the aerodrome operator. CASA also reduced requirements for aerodrome operators to broadcast reports directly to pilots. These reduced broadcast requirements for aerodrome operators will be offset by the provision of the relevant runway surface contamination information to pilots by air traffic controllers as part of their flight information service. Additionally, wet runways are currently managed through pilot in command responsibilities under the Part 91 MOS, including flight planning which must take into account authorised weather reports and forecasts.

Following a final review by the NRSRG GRF Implementation Working Group in January 2024, it was noted that linking aerodrome operations to the current requirement for serviceability inspections ‘after a severe wind event, a severe storm or a

period of heavy rainfall', would have unintended consequences whereby a runway could become unserviceable due to events not related to GRF, such as foreign object debris (FOD) on the runway surface, or flooding of the runway, and no inspection would be required thus creating an unsafe condition for non-scheduled aeroplane operations. Further, it was agreed that aeroplane operations in progress should be subject to GRF inspections and reporting, subject to the aerodrome operator 'knowing' those aeroplane operations were taking place.

The miscellaneous amendments in the Part 139 MOS amendments were also widely supported.

Office of Impact Analysis (OIA)

An Impact Analysis (*IA*) is not required because the instrument is covered by a standing agreement between CASA and OIA under which an IA is not required for amendments to Manuals of Standards (OIA id: 14507).

Sector risk, economic and cost impact

Subsection 9A (1) of the Act states that, in exercising its powers and performing its functions, CASA must regard the safety of air navigation as the most important consideration. Subsection 9A (3) of the Act states that, subject to subsection (1), in developing and promulgating aviation safety standards under paragraph 9 (1) (c), CASA must:

- (a) consider the economic and cost impact on individuals, businesses and the community of the standards; and
- (b) take into account the differing risks associated with different industry sectors.

The cost impact of a standard refers to the direct cost (in the sense of price or expense) which a standard would cause individuals, businesses, and the community to incur. The economic impact of a standard refers to the impact a standard would have on the production, distribution, and use of wealth across the economy, at the level of the individual, relevant businesses in the aviation sector, and the community more broadly. The economic impact of a standard could also include the general financial impact of that standard on different industry sectors.

The sector risk has been identified as an aircraft accident during a landing due to the pilots being misinformed about the extent of a wet or contaminated runway. The type of risk can be seen in the ATSB's report AO-2020-002 of an incident at Newman aerodrome where wet and standing water was a contributing factor to a runway excursion.

Although runway serviceability inspections can involve a cost, the expansion of the criteria for when a serviceability inspection will be required under the Part 139 MOS is unlikely to result in any significant increase in inspections undertaken. This is because:

- the design of runways with transverse slopes is to prevent standing water and so standing water is unlikely to form on runways
- the most likely events that may lead to standing water (a severe storm or a period of heavy rainfall) already trigger the requirement for an inspection
- while a weather event of snow is something that may trigger standing water, this is unlikely and rare at Australian aerodromes.

Feedback to CASA from the major controlled aerodromes is that they already undertake the required number of inspections.

Initial feedback from the public consultation suggested that some regional aerodromes might incur an additional cost to undertake the additional runway inspections when they do not have advance notice of flights. However, this perception arose from uncertainty about the wording of the relevant provisions which CASA then amended to more clearly preserve the original intent of only requiring an additional inspection if an aerodrome had advance notice of a flight. This will ensure there is no significant cost impact on regional aerodromes.

Some consultation feedback suggested that the obligation to conduct unplanned inspections after significant weather events may have a material cost impact on regional or rural aerodromes. However, this is not the intent of the changes. A significant weather event will require inspection to ensure that aviation safety is not seriously jeopardised (as occurred at Newman, for example), but it is considered that such events will be quite rare and CASA intends to monitor the application and implications of the GRF arrangements to ensure that its original intent remains in practice.

Under the Part 91 MOS amendment the reporting of braking conditions by pilots does not impose any additional compliance cost on pilots as they are already operating the aircraft and in communication with ATC. Nor will the addition of the reporting requirement impose an opportunity cost because it does not increase the flight time of the aircraft.

Environmental impact

Under subsection 9A (2) of the Act, while regarding the safety of air navigation as the most important consideration, CASA must exercise its powers and perform its functions in a manner that ensures that, as far as practicable, the environment is protected from the effects and associated effects of the operation and use of aircraft.

It is not anticipated there will be any negative environmental impacts as a result of the Part 139 MOS amendment or the Part 91 MOS amendment, as compared to the baseline that existed in February 2019 before the Part 139 MOS was made, since the MOS amendments are essentially administrative in nature and do not create any new or material environmental impacts arising from relevant aerodrome operations.

Statement of Compatibility with Human Rights

The Statement of Compatibility with Human Rights at Appendix 1 has been prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

To the extent that the Part 139 MOS amendment and the Part 91 MOS amendment engage certain of the rights, it does so in a way that is reasonable, necessary and proportionate to ensure the safety of relevant aerodrome operations.

Commencement and making

The Part 139 MOS amendment commences on the day after it is registered. However, as described above under the heading **Background — commencement**, it takes a delayed way to accommodate relevant operators in moving to full implementation of it.

The Part 91 MOS amendment commences on the day after it is registered.

The instruments have been made by the Director of Aviation Safety, on behalf of CASA, in accordance with subsection 73 (2) of the Act.

Detailed explanation of:**Part 139 Manual of Standards (Global Reporting Format and Miscellaneous Amendments) Instrument (No. 1) 2024**

1 Name of instrument

This section names the Part 139 MOS amendment.

2 Commencement

- (1) Under this subsection, the instrument commences on the day after it is registered.
- (2) Under this subsection, the amendments only take effect in accordance with section 3.

3 When amendments take effect

- (1) Under this subsection, the amendments in Schedule 1 take effect on commencement.
- (2) Under this subsection, for the operator of one of the following:
 - (a) a controlled aerodrome; or
 - (b) a certified aerodrome where scheduled air transport operations in accordance with Part 121 of CASR are conducted;
 the amendments under Schedule 2 take effect on 1 August 2024.
- (3) Under this subsection, for the operator of another kind of certified aerodrome, the amendments under Schedule 2 take effect on 1 February 2025.

A Note explains that nothing in section 3 prevents an aerodrome operator from voluntarily implementing the requirements arising under Schedule 2 before 1 August 2024 or 1 February 2025, as applicable.

4 Amendment of the *Part 139 (Aerodromes) Manual of Standards 2019*

Under this section, Schedule 1 and Schedule 2 amend the Part 139 MOS.

Schedule 1 Amendments

These are the miscellaneous and minor amendments.

- [1]** This amendment corrects a typographical error in cross-referencing the section of the MOS dealing with ICAO and other documents.

[2] Subsection 3.01 (2), definitions

This amendment adds a new definition of *runway starter extension*.

[3] After subsection 3.01 (2)

This amendment adds specific definitions for use in the GFR provisions relating to runway surface conditions, including the definitions of:

- *contaminant*
- *runway condition assessment matrix* or *RCAM*
- *runway condition code* or *RWYCC*
- *runway condition report* or *RCR*
- *runway surface condition descriptors*
- *slippery wet runway*.

[4] Paragraph 8.16 (2) (e)

This amendment corrects a typographical error in describing the length of line ends in the pre-threshold area of a runway.

[5] Paragraph 9.18 (1) (c)

This amendment allows CASA to issue an approval that a visual approach slope indicator system (a *VASIS*) need not be the subject of a flight check when an operator is commissioning a lighting system.

[6] Subsection 9.18 (2)

This amendment is consequential on amendment 5 and provides that CASA may only issue the written approval if the VASIS is for temporary use and is supported by a safety assessment and safety conditions (if any required).

[7] Paragraph 11.07 (1) (f)

This amendment requires that, for carrying out works, the aerodrome manual must contain procedures for the use of surface vehicles and equipment.

[8] Section 11.14

Under this amendment when surface vehicles operate on or near the movement area of an aerodrome, the aerodrome manual must contain additional procedures requiring the driver of the surface vehicle to read back to ATC the safety-related parts of any ATC clearances or instructions transmitted to the driver by voice.

[9] Subsection 14.03 (4)

This amendment is designed to revise the communication equipment requirements for an airside vehicle operating on a runway strip, a runway, a taxiway strip or a taxiway so that (with exceptions under subsections (7) and (8)) for a non-controlled aerodrome or an aerodrome where ATC is not in operation, there is at least a VHF receiver capable of monitoring the CTAF or ATC frequencies, and for a controlled aerodrome where ATC is in operation, there is a VHF radio capable of two-way communications with ATC.

[10] Subsection 14.03 (8)

Under this amendment, the exception under subsection (8) is recast merely to be consistent with the changes made by amendment 9.

[11] After section 14.05

This amendment inserts a new section 14.06 concerning surface vehicle control and communications.

Under subsections (1) and (2), the driver of a vehicle must not operate on the manoeuvring area of a controlled aerodrome without authorisation from the ATC service if the ATC service is in operation.

Under subsection (3), the driver of a vehicle operating, or intending to operate, on the manoeuvring area of a controlled aerodrome must comply with clearances and instructions, and read back to the air traffic controller the safety-related parts of any clearance or instruction transmitted by voice.

Under subsection (4), the following parts of a clearance or instruction must always be read back to the air traffic controller: any route specified in a clearance or instruction; any clearance to, any conditional clearance to, or any instruction to, operate on, enter, stop on, wait on, hold short of, cross, or vacate, any runway or taxiway; and any radio frequency instructions.

Schedule 2 Amendments

Schedule 2 contains the GRF amendments.

[1] Paragraph 11.03 (1) (b)

The aerodrome manual must contain procedures for carrying out aerodrome serviceability inspections. Under this amendment, the new requirement is that it must contain procedures for making changes to the runway condition code (the *RWYCC*) and runway surface contaminant types.

[2] Paragraph 11.05 (1) (d)

This amendment provides that the aerodrome manual for controlled aerodromes must contain procedures for using aerodrome reports to notify ATC, AIS and pilots of the relevant *RWYCC* and runway surface descriptions.

[3] Paragraph 12.01 (1) (a)

Under this amendment, the operator of a certified aerodrome must carry out an aerodrome serviceability inspection when there has been a severe wind event, a severe storm, or a period of heavy or prolonged rainfall, the latter event being an addition to the other pre-existing triggers.

A Note explains that if pooling or ponding of water, or poor drainage, is observed on a runway, remedial maintenance must be undertaken as soon as possible. A second Note explains that aerodrome personnel are not expected to carry out an aerodrome serviceability inspection if weather events create a work, health and safety hazard, for example, if lightning in the area requires the movement area to be vacated.

[4] Paragraph 12.01 (1) (d), including the Note

This amendment adds an additional circumstance in which an aerodrome serviceability inspection must be carried out, namely, when aeroplane operations are scheduled, or notified in advance to the aerodrome operator by the aeroplane operator, or are known to be in progress at the aerodrome, and

meteorological conditions may have caused the RWYCC to change, or a runway surface contaminant type to be present, or to have changed.

A Note explains that CASA recommends that an additional aerodrome serviceability inspection should be carried out if a pilot or ARFFS provider reports a hazard.

[5] Subsection 12.01 (2)

Under this amendment, requirements for additional aerodrome serviceability inspections are clarified and added to. Thus, without affecting the requirements under subsection (1), for an aerodrome with scheduled air transport operations:

- (a) as before — at least 2 aerodrome serviceability inspections must be carried out each week, with at least 48 hours between any 2 inspections; and
- (b) as before — at least 1 aerodrome serviceability inspection must be carried out on each day that an air transport movement is scheduled; and
- (c) newly introduced — at least 2 aerodrome serviceability inspections must be carried out on each day that an international air transport movement is scheduled for a Code 3 or a Code 4 runway if at least 6 hours elapse between each air transport movement.

PROVIDED THAT the requirements of each individual paragraph are met, an inspection carried out for the purpose of one paragraph may be used to satisfy the requirements of another paragraph.

[6] After subsection 12.01 (2)

This amendment expressly provides in a new subsection (2A), for the proviso mentioned above.

[7] Subsection 12.03 (3), the heading

This amendment essentially adds 2 new Notes. The first is to reference section 12.04A (amendment 9) for additional GRF inspection requirements. The second is to highlight that if pooling or ponding of water is observed on a runway, remedial maintenance *must be undertaken as soon as possible* as elaborated on under section 18.03.

[8] Section 12.04, the heading

This amendment adds a new heading and Note to reference section 12.04A (amendment 9) for additional GRF matters to report in relation to aerodrome runway conditions.

[9] After section 12.04

This section insert a new section 12.04A, Global reporting format and aerodrome serviceability inspection requirements.

- (1) Under subsection (1), without affecting any other requirements under Chapter 12, the aerodrome operator of a certified aerodrome with an operational sealed runway (an *operational runway*) must comply with the section.

- (2) Under subsection (2), an aerodrome serviceability inspection carried out for Chapter 12 must specifically check for visible dampness, standing water, snow, slush, ice or frost on an operational runway.

A Note explains that, in this section, snow, slush, ice and frost of various kinds are described as “other contaminants”, to distinguish them from contamination by dampness or water.

Using runway surface description to determine the RWYCC

- (3) Under subsection (3), the aerodrome operator must use the applicable runway surface description mentioned in Table 12.04A (3) to determine the applicable RWYCC for an operational runway as follows:

Table 12.04A (3) — RWYCC

Using a runway surface description to assign a RWYCC	
For a runway surface description of: Column 1	the applicable RWYCC is: Column 2
DRY	6
WET (The runway surface is covered by any visible dampness or water up to and including 3 mm depth)	5
WET (“slippery wet” runway)	3
STANDING WATER	2

A Note explains that the RWYCC assignment table is in PANS-Aerodromes and includes WET and DRY conditions.

Wet or standing water (but not slippery wet) — reporting

- (4) Under subsection (4), when aeroplane operations are scheduled, or notified in advance to the aerodrome operator by the aeroplane operator, or are known to be in progress at the aerodrome, the aerodrome operator must report an operational runway that is wet, or has standing water, as soon as possible in an RCR.
- (5) Under subsection (5), the RCR must include:
- the relevant runway number; and
 - subject to paragraph (c), for each identified one-third length of the runway, the applicable RWYCC and runway surface description in accordance with Table 12.04A (5); and
 - if 25% or less, of a one-third length of the runway has standing water on it — a RWYCC of 5 (WET) for the one-third length; and
 - if the depth of any standing water on the runway is reasonably ascertainable — a report of the depth of that standing water.

Table 12.04A (5) — Wet or standing water reports

For a runway surface description of: Column 1	the applicable RWYCC is: Column 2	and the report must be made to: Column 3
WET	5	ATC (if available)
STANDING WATER	2	(a) the NOTAM Office, and ATC (if available); and (b) if the ATC is not available — pilots, but only where the aerodrome operator has available UNICOM or CA/GRS.

- (6) Under subsection (6), the RCR must be made to the relevant persons in accordance with Table 12.04A (5).
- (7) Under subsection (7), despite subsection (4), if an agreement exists between the aerodrome operator and ATC for ATC to assess and report the runway or a portion of it when WET or DRY, the aerodrome operator does not need to make the RCR to ATC.

Slippery wet — reporting

- (8) Under subsection (8), when aeroplane operations are scheduled, or notified in advance to the aerodrome operator by the aeroplane operator, or are known to be in progress at the aerodrome, the aerodrome operator must report an operational runway, as soon as possible in an RCR, if:
- (a) it is slippery wet; or
 - (b) the aerodrome operator has received at least 2 consecutive pilot reports of MEDIUM runway braking action for the runway, or a portion of it; or
 - (c) the aerodrome operator has received at least 2 consecutive ATC reports of MEDIUM runway braking action for the runway, or a portion of it.

A Note explains that pilot reports of runway braking action as MEDIUM, meaning a slippery wet runway surface, are based on pilot observations that braking deceleration is noticeably reduced for the wheel braking effort applied, or that directional control is noticeably reduced.

- (9) Under subsection (9), the RCR must include:
- (a) the relevant runway number; and
 - (b) for each identified one-third length of the runway:
 - (i) the applicable RWYCC and runway surface description in accordance with Table 12.04A (9); and
 - (ii) the applicable percentage extent of the slippery wet surface.

- (10) Under subsection (10), the RCR must be made to the relevant persons in accordance with Table 12.04A (9), which provides as follows:

Table 12.04A (9) — Slippery wet reports

For a runway surface description of: Column 1	the applicable RWYCC is: Column 2	and the report must be made to: Column 3
SLIPPERY WET	3	(a) the NOTAM Office, and ATC (if available); and (b) if the ATC is not available — pilots, but only where the aerodrome operator has available UNICOM or CA/GRS.

Other contaminants — using runway surface description to determine the RWYCC

- (11) Under subsection (11), for other contaminants, the aerodrome operator must use the runway surface description mentioned in Table 12.04A (11) to determine the applicable RWYCC for an operational runway, as follows:

Table 12.04A (11) – Other contaminants – RWYCC

Using a runway surface description to assign a RWYCC for other contaminants	
For a runway surface description of: Column 1	the applicable RWYCC is: Column 2
FROST SLUSH (up to and including 3 mm depth) DRY SNOW (up to and including 3 mm depth) WET SNOW (up to and including 3 mm depth)	5
COMPACTED SNOW (Outside air temperature minus 15 degrees Celsius and below)	4
DRY SNOW (more than 3 mm depth) WET SNOW (more than 3 mm depth) DRY SNOW ON TOP OF COMPACTED SNOW (any depth) WET SNOW ON TOP OF COMPACTED SNOW (any depth)	3

Using a runway surface description to assign a RWYCC for other contaminants	
For a runway surface description of:	the applicable RWYCC is:
Column 1	Column 2
COMPACTED SNOW (outside air temperature above minus 15 degrees Celsius)	
SLUSH (more than 3 mm deep)	2
ICE	1
WET ICE WATER ON TOP OF COMPACTED SNOW DRY SNOW OR WET SNOW ON TOP OF ICE	0

A Note explains that this RWYCC assignment table is in PANS-Aerodromes and includes SNOW and ICE conditions.

Other contaminants — reporting

- (12) Under subsection (12), when aeroplane operations are scheduled, or notified in advance to the aerodrome operator by the aeroplane operator, or are known to be in progress at the aerodrome, the aerodrome operator must report an operational runway that has other contaminants, as soon as possible in an RCR.
- (13) Under subsection (13), the RCR must include:
- the relevant runway number; and
 - subject to paragraph (c), for each identified one-third length of the runway, the applicable RWYCC and runway surface description in accordance with Table 12.04A (11); and
 - if 25% or less, of a one-third length of the runway has other contaminants on it — a RWYCC of 5 (WET) for the one-third length; and
 - if the depth of any other contaminants on the runway is reasonably ascertainable — a report of the depth of the contaminants.
- (14) Under subsection (14), the RCR must be made to:
- the NOTAM Office and ATC (if available); and
 - if the ATC is not available — pilots, but only where the aerodrome operator has available UNICOM or CA/GRS.

[10] Paragraph 13.03 (c)

This amendment adds runway surface condition inspections to the requirements for an aerodrome reporting officer.

[11] Paragraph 13.03 (d)

This amendment adds runway surface condition reporting to the requirements for an aerodrome reporting officer.

[12] Subsection 18.02 (2), Note (2)

This amendment updates the Note to reference ICAO Document, Assessment, Measurement and Reporting of Runway Surface Conditions (Cir 355) as a source of guidance on evaluating the runway surface friction characteristics. References to ICAO documents are taken to be references to those documents as they exist or are in force from time to time.

[13] After subsection 18.02 (2)

This amendment inserts a new subsection (2A), to provide that the aerodrome operator must ensure that any person using a friction measuring device is demonstrably competent in the use of the device. A Note explains that competence may be demonstrated through appropriate training or experience.

[14] After section 18.02

This amendment inserts a new section 18.03 in relation to water pooling or ponding. Thus, if pooling or ponding of water, or poor drainage is observed on a runway in the course of an aerodrome serviceability inspection under paragraph 12.01 (1) (a), the aerodrome operator must ensure that remedial maintenance is undertaken as soon as possible.

A Note explains that under paragraph 12.01 (1) (a), the operator of a certified aerodrome must carry out an aerodrome serviceability inspection if there has been a severe wind event, a severe storm, or a period of heavy rainfall.

A second Note explains that for section 18.03, it is not generally the case that runways or parts of runway surfaces need to be overlaid, resurfaced or replaced, but maintenance action should be taken to address the formation of depressions or surface irregularities that allow water to pool, pond, or not drain.

Statement of Compatibility with Human Rights

*Prepared in accordance with Part 3 of the
Human Rights (Parliamentary Scrutiny) Act 2011*

Part 139 Manual of Standards (Global Reporting Format and Miscellaneous Amendments) Instrument (No. 1) 2024

Part 91 Manual of Standards (Global Reporting Format) Amendment Instrument 2024 (No. 1)

The legislative instruments are compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the legislative instruments

Under subsection 15J (4) of the *Legislation Act 2003*, this Explanatory Statement deals with both of the above Manuals of Standards amendment instruments because they are interrelated, the Part 91 Manual of Standards amendment being essentially consequential on the Part 139 Manual of Standards amendment.

Since 2019, the *Part 139 (Aerodromes) Manual of Standards 2019* (the **Part 139 MOS**) has set out the revised and consolidated standards for the construction, maintenance and operation of certified aerodromes, and for the radiocommunications facilities required at aerodromes.

The *Part 139 Manual of Standards (Global Reporting Format and Miscellaneous Amendments) Instrument (No. 1) 2024* (the **Part 139 MOS amendment**) amends the Part 139 MOS essentially to establish the new global reporting system for assessing and reporting runway surface conditions, known as the Global Reporting Format (**GRF**), mandated by the International Civil Aviation Organization (**ICAO**), and designed to enable the harmonised assessment and reporting of runway surface conditions in the interests of aviation safety.

The GRF provides uniformity and consistency in the assessment and reporting of runway surface conditions. Assessing and reporting the condition of the movement area and, in particular, the runway is necessary to provide the flight crew with the information needed for safe operation of the aeroplane. A runway condition report is used for reporting assessed information.

The *Part 91 (General Operating and Flight Rules) Manual of Standards 2020* (the **Part 91 MOS**) sets out the standards for “the rules of the air” for all pilots, and the general operating rules for pilots who are not operating under an Air Operator’s Certificate or other certificate. The Part 91 MOS is a foundational ruleset for the safety of all aviation operations. It consolidates the existing rules of the air, contains some new rules to enhance operational flexibility and improve aviation safety, and it brings Australian requirements more in line with the Standards and Recommended Practices of ICAO.

The *Part 91 Manual of Standards (Global Reporting Format) Amendment Instrument 2024 (No. 1)* (the **Part 91 MOS amendment**) makes 3 amendments to the Part 91 MOS to incorporate implications of the GRF into 3 sections of the Part 91 MOS.

The opportunity has also been taken in the Part 139 MOS amendment to make a number of minor or miscellaneous amendments to insert new definitions, correct typographical errors, modify flight check rules for VASIS lighting systems, require additional aerodrome manual procedures for use of surface vehicles in aerodrome works, and revise the communication equipment requirements for airside vehicles.

Human rights implications

The Part 139 MOS amendment and the Part 91 MOS amendment may engage the following human rights:

- the right to life under Article 6 of the International Covenant on Civil and Political Rights (the **ICCPR**)
- the right to safe and healthy working conditions under Article 7 of the International Covenant on Economic, Social and Cultural Rights (the **ICESCR**)
- the right to work under Article 6 (1) of the ICESCR.

Right to life under the ICCPR

Right to safe and healthy working conditions under the ICESCR

Right to work under the ICESCR

The rights are engaged in a positive way because there is little doubt that the introduction of the GRF and associated runway condition reporting will make aeroplane operations at relevant aerodromes safer by ensuring that relevant pilots in command and flight crew are apprised of the condition of a runway prior to landing and can take appropriate action in response to it.

Conclusion

The Part 139 MOS amendment and the Part 91 MOS amendment are, therefore, compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*. To the extent that the instrument engages certain of these rights, it does so in a way that is reasonable, necessary and proportionate to ensure the safety of relevant aerodrome operations.

Civil Aviation Safety Authority